

ABSTRACT OF THE DISCLOSURE  
CONTAMINATION-RESISTANT COATED SUBSTRATES

5       A coated substrate is claimed. The coating, disposed on the substrate,  
comprises a self-assembled film having at least one bilayer. Each bilayer comprises a  
polyanion electrolyte layer and a polycation electrolyte layer. The uppermost layer or  
exposed layer of the coating comprises a fluoroalkyl group. Each bilayer thickness  
ranges from about 0.1 nanometers to about 20 nanometers. The resulting coated  
substrate has a low surface energy and is hydrophobic and/or oleophobic.

10